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10/711,735

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Lee George LABORCZFALVI

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EXAMINER

HUARACHA, WILLY W

ART UNIT

PAPER NUMBER

2195

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/711,735	Applicant(s) LABORCZFALVI ET AL.	
	Examiner WILLY W. HUARACHA	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04/23/2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 1-34 are currently pending and have been examined. Claims 1-13, 16-21 and 22-32 have been amended.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 26-34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. As per claims 26-34, the claimed apparatus is software per se, as they are not tangibly embodied on any sort of physical medium. The claim recites "means for receiving", "means for forming", "means for requesting", wherein all these means structure are software element and does not include or embodied on any physical medium or hardware. Applicant is suggested to amend the claim to include hardware in the claim. Appropriate correction required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 1-34, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the

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specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular, the amended claim 1 recites "responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the process executes". This limitation does not appear to be described in the specification in such a way as to reasonably convey to one of ordinary skill in the art that the invention, at the time the application was filed, had possession of the claimed invention.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The following terms lack antecedent basis:

- i. the context -- claims 1 and 26
- ii. the determined rule – claim 1
- iii. the operating system – claim 1
- iv. the group – claim 5

b. The following claim languages are not clearly understood and indefinite:

- i. As per claim 1, it is uncertain whether "a memory element" in line 7 refers to "a memory element" in line 7 (i.e. if they are the same, 'the' or 'said' should be used). In line 10, it is not clearly understood what is meant by "forming a literal name" and "in response to the determined rule" (i.e. when/why the literal name is formed and what is the reason? What has been determined? Whether it meets the rule or not?).
- ii. As per claim 2, it is uncertain whether "a system object" in line 2 and "the object" in line 5 are the same (i.e. if they are the same, the same consistent "system object" should be used). The claim repeats the limitations "*receiving a*

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*request to access a system object stored in a memory element provided by a computer the request received from a process executing in the context of an isolation environment the isolation environment comprising an application isolation layer and a user isolation layer, the request including a virtual name for the system object” which already presented in step (a) of claim 1. The examiner recommends the applicant to amend the claim by removing the repeating limitations (e.g. *The method of claim 1, wherein step (a) further comprises: the system object is selected from a group consisting of a semaphore, a mutex, a mutant, a timer, an event, a job object, a file-mapping object, a section, a named pipe, and a mailslot*).*

iii. As per claims 3-11, 16-20, 22-25, 28 32, appear to have similar deficiencies as claim 2. Therefore, they are rejected under the same rationale as of claim 2 above.

iv. As per claim 26, in line 7, it is not clearly understood what is meant by “forming a literal name”. In line 10, it is not clearly understood what is meant by “forming a literal name” and “in response to the determined rule” (i.e. when/why the literal name is formed and what is the reason? What has been determined? Whether it meets the rule or not?).

v. As per claim 27, It is uncertain whether the limitations “a request” and “a system object” in line 2 are the same or different from “a request” and “a system object” in independent claim 26, lines 3 and 4 respectively (e.g. if they are the same, ‘the’ or ‘said’ should be used).

vi. As per claims 2-25 and 28-32, appear to have similar deficiencies as claim 27. Therefore, are rejected for the same rationale as claim 27.

Claim Rejections - 35 USC § 102

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9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claim 26 is rejected under 35 U.S.C. 102(e) as being anticipated by Demsey et al. (US Patent 7,203,941 B2).

11. As per claim 26, Demsey teaches the invention including an apparatus for virtualizing access to named system objects comprising:

computer-readable program means for receiving a request to access a system object from a process executing in the context of an isolation environment, the isolation environment comprising an application isolation layer (fig. 1, managed code portion) and a user isolation layer (fig. 1, 102 User Code), the request including a virtual name for the system object (fig. 3, step 304; and col. 7, lines 17-25);

computer-readable program means for forming a literal name for the system object responsive to the application isolation layer and the user isolation layer forming the isolation environment in which the process executes (fig. 1, Item 108 and 114; fig. 3, step 310; and col. 7, line 63 through col. 8, line 4);

Computer-readable program means for requesting access to the system object using the literal name (fig. 1, 726 "Operating System"; fig. 3, steps 310-314; and col. 8, lines 5-15).

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12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-25, 27-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demsey et al. (US Patent 7,203,941 B2) in view of Erlingsson (US PG Publication 20030233544 A1).

14. As per claim 1, Demsey teaches the invention substantially as claimed including a method for virtualizing access to named system objects, the method comprising instructing a suitably programmed computer to perform the steps of:

(a) receiving a request to access a system object stored in a memory element provided by a computer (fig. 7, Item 706 "System Memory"), the request received from a process executing in the context of an isolation environment (fig. 1, 110 Virtual environment for VM 104 and Application 102), the isolation environment comprising an application isolation (Fig. 1, "managed code portion") layer and a user isolation layer (Fig. 1, 102 "user code"), the request including a virtual name for the system object (fig. 3 and col. 7, lines 17-21; see also fig. 1);

(c) forming a literal name for the system object in response to the determined rule (fig. 3, method 300, step 310 "assign name and address for requested native resources"; col. 7, line 63 -col. 8, line 4; col. 15, lines 21-23, 28-34);

(d) issuing to the operating system a request to access the system object, the request including the literal name for the system object (fig. 1, and related text; wherein discloses a).

15. Demsey did not specifically teach selecting, from a memory element provided by the computer, a rule associated with the request.

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16. However, Erlingsson teaches selecting, from a memory element provided by the computer, a rule associated with the request (fig. 6, Items 601 Derivation Engine and 609 Derivation Rules; and par. 0070, lines 1-6).

17. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of "Associating a native resource with an application" of Demsey with the techniques of intercepting requests and determining access to resources in accordance with specified rules as taught by Erlingsson because it would have provided a way for gaining access to system resources in accordance to specified rules in order to allow the installation or execution of incomparable applications.

18. As per claim 2, Demsey teaches receiving a request to access a system object stored in the memory element provided by the computer, the object selected from the group consisting of a semaphore, a mutex, a mutant, a timer, an event, a job object, a file-mapping object, a section, a named pipe, and a mailslot (col. 3 lines 27-30).

19. As per claim 3, Erlingsson teaches intercepting a request to access a system object from a process executing in the context of an isolation environment, the isolation environment comprising an application isolation layer and a user isolation layer, the request including a virtual name for the system object (par. 0067, lines 13-21).

20. As per claim 4, Erlingsson teaches receiving a request to open a system object (par. 0067, lines 9-12; and par. 0076, lines, 4-6).

21. As per claim 5, Erlingsson discloses receiving a request to create a system object (par. 0067, lines 9-12; and par. 0076, lines, 4-6).

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22. As per claim 6, Erlingsson teaches that a rule action selected from the group consisting of ignore, redirect and isolate, is associated with the request (par. 0089, lines 1-5 ; and fig. 7, Items 720, 725, 730, 735 and 740).

23. As per claim 7, Erlingsson teaches accessing a rules engine to determine a rule action associated with the virtual name included in the received request. (par. 0067 and fig. 6, Items 601 derivation engine and 609 Derivation Rules).

24. As per claim 8, Demsey teaches forming, a literal name for the system object stored in the memory element provided by the computer using the virtual name provided in the request and a scope-specific identifier (fig. 3, step 310 "Assign Name and Address for Requested Native Resource"; and col. 8, lines 1-4).

25. As per claim 9, Demsey teaches forming, a literal name for the system object stored in the memory element provided by the computer using the virtual name provided in the request and a scope-specific identifier, the scope-specific identifier associated with an application isolation scope with which the process making the request is associated (fig. 3, step 310 "Assign Name and Address for Requested Native Resource"; and col. 8, lines 1-4).

26. As per claim 10, Demsey teaches forming, a literal name for the system object stored in the memory element provided by the computer using the virtual name provided in the request and a scope-specific identifier, the scope-specific identifier associated with the user isolation scope in which the process making the request executes (fig. 3, step 310 and col. 8, lines 1-4).

27. As per claim 11, Erlingsson teaches identifying the system object as having global visibility (par. 0056, lines 3-6).

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28. As per claim 12, Erlingsson teaches identifying the system object as having session visibility (par. 0056, lines 3-6).

29. As per claim 13, Erlingsson teaches forming a literal name for the system object stored in the memory element provided by the computer that is identical to the virtual name provided in the request (par. 0070, lines 14-17)

30. As per claim 14, Demsey teaches the step of receiving a handle from the operating system identifying the accessed object (col. 4, lines 39-46; and fig. 1, Items 726, 114, 112, 106 and 102).

31. As per claim 15, Demsey teaches the step of transmitting the handle to the process (col. 4, lines 39-46; and fig. 1, Items 726, 114, 112, 106 and 102).

32. As per claims 16 and 21, the claims are variations of claim 4. Therefore they are rejected under the same rationale as claim 4 above.

33. As per claims 17 and 22, the claims are variations of claim 8. Therefore they are rejected under the same rationale as claim 8 above.

34. As per claims 18, and 23, the claims are variations of claim 9. Therefore they are rejected under the same rationale as claim 9 above.

35. As per claims 19 and 24, the claims are variations of claim 10. Therefore they are rejected under the same rationale as claim 10 above.

36. As per claims 20 and 25, the claims are variations of claim 13. Therefore they are rejected under the same rationale as claim 13 above.

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37. As per claim 27, Erlingsson teaches a computer-readable program means for receiving a request intercepts a request to open a system object (fig. 6, Item 608 "Interception Module").

38. As per claim 28, Erlingsson teaches the computer-readable program means for receiving a request intercepts a request to create a system object (par. 0067, lines 9-12; and par. 0076, lines, 4-6).

39. As per claim 29, Erlingsson teaches further comprising computer-readable program means for storing a rule associated with the request (fig. 6, 609 "Derivation Rules").

40. As per claim 30, Erlingsson teaches the computer-readable program means for storing a rule comprises a database (fig. 6, 609 "Derivation Rules").

41. As per claim 31, Erlingsson teaches the computer-readable program means for forming a literal name for the system object forms a literal name for the system object that is identical to the virtual name (par. 0070, lines 14-17).

42. As per claim 32, Erlingsson teaches the computer-readable program means for forming a literal name for the system object forms a literal name for the system object using the virtual name and a scope-specific identifier (fig. 3, step 310 "Assign Name and Address for Requested Native Resource"; and col. 8, lines 1-4).

43. As per claim 33, Erlingsson teaches the scope-specific identifier is associated with an application isolation scope with which the process making the request is associated (fig. 3, step 310 "Assign Name and Address for Requested Native Resource"; and col. 8, lines 1-4).

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44. As per claim 34, Erlingsson teaches the scope-specific identifier is associated with the user isolation scope in which the process making the request executes (fig. 3, step 310 and col. 8, lines 1-4).

Response to Arguments

45. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

46. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLY W HUARACHA whose telephone number is (571) 270-5510. The examiner can normally be reached on 8:30am to 6:00pm, EST.

47. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai T. An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

48. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/

/Willy W. Huaracha/

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Supervisory Patent Examiner, Art Unit 2195

Examiner, Art Unit 2195